REMARKS

Herein, the "Action" or "Office Action" refers to the Office Action dated July 31, 2003.

Applicant respectfully requests reconsideration and allowance of all of the claims of the application. Claims 1-31 are presently pending. Claims amended herein are 1, 10, 17, 25, and 26. Claims cancelled herein are none. New claims added herein are none.

The Applicant expressly grants permission to the Office to interpret all pending claims of this application.

Prior Art Status of References

Applicant does not explicitly or implicitly admit that any reference is prior art. Nothing in this communication should be considered an acknowledgement, acceptance, or admission that any reference is considered prior art.

Reserving Right to file a §131 Declaration

Applicant expressly reserves the right to file a §131 declaration with respect to Lennert et al.

Substantive Claim Rejections

Claim Rejections under §102 and §103

The Office rejects all pending claims under §102 and §103. For the reasons
5   set forth below, the Office has not made out a *prima facie* case of anticipation (i.e.,
§102). Likewise, for the reasons set forth below, the Office has not made out a
prima facie case of obviousness (i.e., §103). Accordingly, Applicant respectfully
requests that the rejections be withdrawn and the case be passed along to issuance.

The Office's rejections are based upon one or more of the following
10   references:

- **Lennert**: *Lennert et al.*, US Patent No. 6,169,994;

- **Marron**: *Marron*, US Patent No. 5,359,730.

The Office maintains the rejections provided in the Office Action dated
15   February 27, 2003. Applicant again traverses these rejections.

Before proceeding into Applicant's response to the Office's latest Action,
Applicant would like to briefly focus on terminology as used by Lennert.

What does "Software" mean in Lennert?

20   The Office indicates that Lennert discloses the preamble of the base
independent claims (e.g., "a program-module update system" for claim 1).
Applicant submits that Lennert does not disclose this. Applicant asserts that,
instead, Lennert discloses a system for updating "configuration data" or

"configuration databases" when hardware or software is updated. This "configuration data" or "configuration databases" are not program modules and do not include program modules.

So, instead of a system for updating "program modules" (as indicated in claim 1), Lennert discloses a system for updating "configuration data." Lennert updates data—not program modules. On col. 5, lines 36-37, Lennert says very clearly what it does: "builds a new database from parts of other databases."

The text of the rest of Applicant's discussion of this topic is found on pages 12-14 of its "Response To Office Action Dated February 27, 2003."

The target that Lennert is updating is "configuration database" using other "configuration databases" (e.g., such the equipment configuration database 30 and other configuration databases 35), "configuration data," and "configuration information." Lennert uses these terms throughout. See the approximately 10 occurrences in the Abstract, 2 occurrences in the Field of the Invention, 3 occurrences in the Summary, and numerous occurrences in the Detailed Description, as well.

Lennert never calls the target data that is being updated a "program module," "program," or the like. However, it does call the program or system (e.g., SEES) doing the updating a "computer program." For example, Lennert says, "[t]his invention uses a *computer program* to mine preexisting hardware equipment configuration data" [emphasis added] at the very beginning of the Abstract. See also "Simple Environment Engineering System ("SEES") computer program" of col. 3, lines 46-47 and the 54 other times in the Detailed Description that Lennert refers to this same type of "program."

However, Lennert appears to use the term "software" in a confusing manner. It appears that Lennert is referring to the configuration databases and configuration data when it refers to "software," "software releases", and "software versions."

5   For example, at col. 4, lines 8-9, Lennert says, "Query by unit 18 also specifies and conforms targeting specific *software releases to common versions*" and then later in lines 28-31, Lennert says that the "computer program [the SEES] uses all current data environments and employs functions to ensure that different *versions of various software databases are converted to a common version*"

10   [emphasis added].

Although it may be common for the term "software" to refer to sections of computer-executable instructions, Applicant submits that is not what Lennert means by that term. Instead, when read in context, Applicant respectfully submits that Lennert's "software" is just another name for the configuration databases.

15   Consequently, this text from the Abstract (lines 8-12) may be re-written to read this way: "The computer program replaces the current system's reliance upon manual data entry by data engineers to configure the operation of a new telecommunication switch or replace the [software] configuration database in a telecommunication switch that was damaged or requires a new hardware

20   equipment configuration data configuration."

Therefore, Applicant respectfully submits that "software" in context of Lennert means "configuration database" or the like and not sections of computer-executable instructions.

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Applicant's Responses to Office's Responses

In this Action, the Office provides specific responses to the Applicant's responses to the February 27, 2003 Action. In the following, Applicant provides the text of the Office's response and Applicant's response to that. According to the

5   reasons given below and in the responses to the February 27, 2003 Action, Applicant asks the Office to withdraw its rejections.

Program Module vs. Configuration Database

Office summarizes Applicant's point this way:

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> Lennert does not disclose a program module update system Instead Lennert discloses a system for updating "configuration data" and "configuration database" when hardware or software is updated.

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In response, the Office indicates that "Lennert discloses updating the configuration database (column 4 lines 20 22, the program that allow for the creation or modification of hardware equipment database")."

It appears that the Office is agreeing with Applicant. Applicant has stated

20   previously that Lennert, indeed, discloses a computer program (e.g., "SEES") that creates a new database or modifies an existing one. These databases do not include program modules.

The Office also indicates that Lennert also teaches the modification of the

25   telecommunication switch system "which contains program and telecommunication switch system is in the hardware configuration database." For support, the Office quotes the Abstract, "The computer program replaces the

current system's reliance upon manual data entry by data engineers to configure the operation of a new telecommunication switch or replace the software[1] in a telecommunication switch that was damaged or requires a new hardware equipment configuration data configuration".

5   Applicant disagrees. Lennert teaches a modification of the "configuration databases." Applicant submits that it does not teach a modification of the "telecommunication switch system." Also, Applicant respectfully submits that the *target-of-Lennert-modification* does not contain a "program."

Furthermore, this quoted sentence from the Abstract does not intend to

10   imply that the computer program will replace "software." This sentence in the Abstract is grammatically complex. In an effort for all to better understand it, Applicant breaks down the sentence grammatically in Fig. A on the next page.

As shown in Fig. A, the subject ("computer program") has two predicates (or verbs): "replaces" and "requires." The tense of both of these verbs agrees

15   with the tense of the subject.

As shown in Fig. A, the verbs ("configure" and "replace") of the participle phrase ("to...") agree in their tenses. The verb ("replace") of the key phrase "replace the software in a telecommunication switch that was damaged" is not an alternative predicate of the subject ("the computer program") of the sentence.

20   Rather, it is a dangling participle. It is orphaned from its "to."

Applicant submits that the meaning of this sentence become more clear with this grammatical breakdown. Instead of a "computer program" in Lennert that replaces software, Lennert is able to replace the "current system's reliance

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[1] Here, "software" should be read "configuration database."

upon manual data entry by data engineers to…replace the [software] <u>configuration</u> <u>database</u> in the telecommunication switch that was damaged."

If the Office disagrees with this breakdown, Applicant encourages the Office to submit its own.

The Office indicates that the switching system (which consists of program) is in the database (column 10, lines 10-12, "The switching equipment in the source databases and their respective configurations").

5   Applicant submits that the context of this text is within the discussion of "the process of engineering a new hardware equipment configuration database...from at least one source database" (col. 9, lines 12-14).

The full text of this sentence reads this way: *"The computer program instructs the user to identify all* the switching equipment in the source databases

10   and their respective configurations." Applicant has emphasized the portion of the text that was excluded from the excerpt cited by the Office. This missing portion is helpful in understanding the context.

This text is not saying that the switching system is actually located within the source database. Rather, it is saying where it is that the switching equipment is

15   identified.

Furthermore, the Office indicates that the "switching system" consists of a "program" and that the "switching system" and "switching equipment" are equivalent. For the record, Applicant respectfully disagrees with these broad definitional assignments. Earlier and later remarks elaborate on this point more.

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The Office indicates that Lennert disclosed database contains several program modules (col. 4, lines 37-47). It further indicates that the "SEES" computer program located on the data build machine (col. 4, line 45, "SEES computer program located on the data build machine") and the data build machine

25   is in the source database (col. 4, lines 40-42 " The data build machine usually

contains or has access to the source database"). The Office indicates that Lennert "shows that database contains different program modules because "SEES" program contains several modules like 'hardware engineering module', 'Dialing plan engineering module', 'network engineering module' (column 6, lines 8-4)".

5   Applicant respectfully submits that Lennert never discloses a "database" that "contains several program modules" in col. 4, lines 37-47. If the Office maintains its rejection, Applicant asks the Office to point to the exact language in col. 4, lines 37-47 that says this.

Applicant agrees that the "SEES computer program" is a program module

10   and, as stated on lines 46-47, it is executable. However, the "SEES computer program" is the program that performs Lennert's database modification. It is not part of any database and, more importantly, it is not part of any database that modifies itself.

Applicant respectfully disagrees with the Office's statement that "the data

15   build machine is in the source database." Again, Applicant sees no language that indicates that the "data build machine" is actually located "in" the source database. Rather, the language appears to say the opposite. The language at col. 4, lines 40-42 quoted by the Office says "The data build machine usually contains or has access to the source database." Indeed, the database may be located "in" the

20   machine, but the machine is not "in" the database.

The Office also indicates that these "program modules are all hardware specific program modules." If the Office is referring to the program modules of SEES, then it does not matter because the SEES program modules are not the

25   target of its own updating. Rather, the configuration databases are the subject.

On page 8 of the Application, Applicant describes a hardware-specific program module as being "a program module that is associated with a specific hardware device and it is generally intended to facilitate computer interaction with such device."

5   While Lennert does appear to discuss hardware-specific *data* (e.g., item 66 in Fig. 3), it does not disclose or teach hardware-specific *program modules*. Therefore, this hardware-specific data is configuration data and not a "section of computer-executable instructions" that is "associated with a specific hardware device."

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Program Module Defined

The Office indicates that the definition of "program module" as found in the specification is not part of the claims. Therefore, Applicant has amended the base independent claims to define a program module as a "section of computer

15   executable instructions."

The Office further indicates that "all the modules in the database perform the actions inherently including the modules are executed in the system." Applicant respectfully submits that there are no modules in the database.

If the Office maintains this rejection, Applicants asks for the Office to

20   specifically point out any disclosure the expressly points out that a program module exists in Lennert's databases and that they are replaced/updated.

Furthermore, it only makes sense that if Lennert discloses this, it would discuss the difficulties involved in updating program modules. There are difficulties involved. Applicant discusses this since it is the subject of at least

some of the claims. Applicant submits that Lennert never discusses these sorts of difficulties because it does not cover this concept.

Determination Unit

5   Office summarizes Applicant's point this way:

Lennert does not disclose "determination unit for determining whether a hardware-specific program module is an updated program module".

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In response, the Office indicates Lennert discloses determination unit for determining whether a hardware-specific program module is an updated program module is shown in (column 6, lines 3-6), "whether an existing database will be modified" inherently including determination unit for determining whether a

15   hardware-specific module is updated, because the database contain several program modules. When databases are updated the program modules in the database are also updated.

Applicant respectfully disagrees. Lennert does not disclose any program modules in the configuration databases. Since there are none, there cannot be a

20   determination unit for determining whether a hardware-specific program module is an updated program module.

Source Redirection

Office summarizes Applicant's point this way:

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Lennert does not disclose "a source redirection unit for specifying a source locus for a program module determined to be an updated program module by the determination unit".

5   In response, the Office noted in the office action Lennert discloses "a source-redirection unit for specifying a source locus for a program module determined to be an updated program module by the determination unit", where the location of the database is the source locus for the program module because the database contains different modules.

10   As stated above, Lennert's databases do not include program modules. Since Lennert operates on data and databases rather than on program modules (as the claims do), Lennert does not specify a new source locus for program modules.

Copying

15   Office summarizes Applicant's point this way:

Lennert does not disclose a program module copier that operates on a "program module". Lennert's operations are focused on configuration data and database not program

20   modules."

In response, the Office indicates that Lennert discloses program module copier for copying source locus to the target locus (column 2, lines 24-28, "Once the target source hardware equipment databases are determined, the computer

program creates a new data directory structure and *selectively copies all* or part of the data from the source hardware equipment databases into the new databases").

The Office says that the data being copied includes program modules like the "hardware engineering module", "Dialing plan engineering module", "network engineering module." The Office says that these modules are part of the SEES program. The SEES program is part of the data build machine and the machine is part of the database. Based on this flow of logic, the Office indicates that the database contains several programs.

Applicant respectfully disagrees reasoning and the conclusion.

Applicant agrees that the "hardware engineering module", "Dialing plan engineering module", "network engineering module" are probably program modules. Applicant agrees that these modules are part of the SEES program. Applicant agrees that the SEES program is part of the data build machine.

However, Applicant and Office disagree about the "data build machine" (and thus the SEES program) being part of the database.

At col. 3, lines 47-48, Lennert equates the "Simple Environment Engineering System" to the "SEES computer program." At col. 5, lines 35-37, Lennert says that the "Simple Environment Engineering System…builds a new database from parts of other databases." At lines 50-51 of the same column, Lennert says that "SEES creates a new database."

Based on this, it appears that the SEES program is recreating a new version of itself. Applicant asks the Office to clarify if that is what it understands Lennert to disclose. If so, it seems that there is great danger associated with a program modifying itself as it executes. There seems to be a great chance of program execution errors and mishaps for executing a module that is not fully updated.

There seems to be great chance of compatibility problems between modules of different versions (when some have yet to be updated).

One would think that there would be a discussion of the problems associated with that and how Lennert avoids them.

5   Applicant submits that no such discussion exists because that is not what Lennert discloses. Rather, it discloses a computer program (e.g., SEES) that updates configuration databases and those database do not include program modules.

10   **Based upon Lennert & Official Notice**

The Office rejects claims 4-5, 12-13, 20-21, and 28-29 under 35 USC § 103(a) as being unpatentable over Lennert in view of Official Notices. Applicant traverses this rejection.

Claims 4, 12, 20, 28

15   These claims are dependent upon a base claim (e.g., claim 1, 10, 17, or 26) and are allowable as depending from an allowable base claim. These claims are also allowable for their own recited features which, in combination with those recited their base claim, are neither disclosed nor suggested by the references of record.

20   According to the above reasons, Applicant asks the Office to withdraw its rejections.

Claims 5, 13, 21, and 29

These claims are dependent upon a base claim (e.g., claim 1, 10, 17, or 26) and are allowable as depending from an allowable base claim. These claims are

also allowable for their own recited features which, in combination with those recited their base claim, are neither disclosed nor suggested by the references of record.

According to the above reasons, Applicant asks the Office to withdraw its
5 rejections.

Based upon Lennert and Marron

The Office rejects claims 8, 9, and 16 under 35 USC § 103(a) as being unpatentable over Lennert in view of Marron. Applicant traverses this rejection.

10 ### Claims 8, 9, and 16

These claims are dependent upon a base claim (e.g., claim 1, or 10) and are allowable as depending from an allowable base claim. These claims are also allowable for their own recited features which, in combination with those recited their base claim, are neither disclosed nor suggested by the references of record.

15 Furthermore, Applicant submits that there is no suggestion, or motivation found in either Lennert or Marron to encourage one of ordinary skill in the art to combine their teachings. Lennert is focused on a updating configuration data for telephone switching equipment. Such equipment does not appear to have an operating system. However, Marron is focused on computing systems (such as
20 mainframe computers) and their operating systems.

According to the above reasons, Applicant asks the Office to withdraw its rejections.

Dependent Claims

In addition to other possible reasons, each dependent claim is allowable for the same reasons that its base claim is allowable. Applicant submits that the Office withdraw the rejection of each dependent claim where its base claim is

5 allowable.

Conclusion

All pending claims are in condition for allowance. Applicant respectfully requests reconsideration and prompt issuance of the application. If any issues remain that prevent issuance of this application, the Office is urged to contact the

10 undersigned attorney before issuing a subsequent Action.

Respectfully Submitted,

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